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## ARTS EDUCATION

### Director of Arts Education position open at MAC

The Montana Art Council (MAC) is seeking a new director of arts education to oversee the direction of MAC's arts education efforts. The position reports to the executive director and supervises contract staff.

This arts education program is considered one of the finest of all the state arts agencies in the country.

The director will have an opportunity for regional and national exposure, as well as the pleasure of working with great arts educators, artists and education leaders throughout the state. The position may have flexible work hours (which need to be coordinated with the

executive director).

The director attends two national or regional professional development/peer meetings per year. Travel throughout Montana is required.

A full description of the job requirements and application process can be found at [svc.mt.gov/statejobsearch/listingdetails.aspx?id=10462](http://svc.mt.gov/statejobsearch/listingdetails.aspx?id=10462).

The position is full time and the director must reside in Helena. The salary range is \$49,000 to \$53,000.

**The application process closes Monday, July 8.**

## Math Moves: STEM education in action

By Karen Kaufmann,  
UM Professor of Dance

In February 2013 the Missoula County Public Schools (MCPS) launched Math Moves, a STEM education program that integrates movement and dance to help Native American students (along with non-Native students) improve their understanding of math and science.

STEM is an acronym for teaching and learning in the categories of science, technology, engineering and mathematics. Many educators are adding the arts to the equation, transforming STEM into STEAM.

Missoula County Public Schools have approximately 550 Native American students representing 49 tribes in grades K-12. Developed by the CoMotion Dance Project at The University of Montana, in collaboration with MCPS educators, Math Moves seeks to engage Native learners through active, research-based strategies that help students internalize concepts, skills and vocabulary, approaching math and science through the lens of an artist.

Dancing is a natural part of Native culture and, within the broader population, large percentages of students are bodily kinesthetic learners. Math Moves uses something known, familiar, and tangible – human movement and interaction – to help teach something more abstract and less well known: math concepts, skills and vocabulary.

CoMotion Dance Project piloted an 11-week program in six Missoula classrooms: four kindergarten classes at Hawthorne Elementary and two Title One math classes at C.S. Porter Middle School. In all, 101 students and five teachers participated.



C.S. Porter sixth graders use 100% of their "kinesphere" in a dance lesson about fractions.

Lesson plans connected to the curriculum came from a soon-to-be-published textbook co-authored by Karen Kaufmann and Jordan Dehline. *The Art of Dance Integration: Mathematics and Science* is designed to help teachers use dance to teach K-5 math and science.

The dance and STEAM curriculum is also being field-tested in several other individual classrooms in Missoula, including Rattlesnake Elementary and Paxson Elementary, with partial funding from the Montana Arts Council.

Through dance, kindergarten students explored magnetic attraction, weight, direction and speed, the five senses, cardinal directions, animal habitats, and the physiology of how our bodies work. Middle-school students used choreography and movement to examine the ideas of two- and three-dimensional objects, area and perimeter, area of triangles, circles and parallelograms, fractions, integers, multiplication and division, percentages, symmetry, asymmetry and angles.

"The students' level of engagement has gone up so much," says middle-school math teacher Marilie Vesledahl. "When we're in math class I can remind them of when they danced area and perimeter and they're able to connect it. The value is very high."

Lindsey Schwickert, CoMotion middle-school dance teaching artist, says she's seen the students really engage and come to life. "They are really starting to blossom in this class, as they gain new experiences moving with directions, pathways, levels and using different actions. I have also let them bring in their own music, which they very much appreciate."

The students are all for it! One sixth-grade boy said, "I feel it's much better to learn math this way, rather than sitting at your desk. You get to move around."

"Yeah," said another student. "It tricks your brain, kind of like a healthy piece of candy."

Math Moves embodies an interdisciplinary learning program grounded in 21st-century skills, boosting collaboration, critical thinking and problem solving. Students use their curiosity and creativity to demonstrate understanding of math concepts, skills and vocabulary by sharing original choreography and movement inventions.

Daily formative and summative assessments track student achievement of math concepts, skills and vocabulary, as well as their confidence and attitudes towards math, all demonstrating the continued effectiveness of the program.

For more information, email Karen. Kaufmann@mso.umt.edu or visit [www.comotiondanceproject.com](http://www.comotiondanceproject.com).

### Arts Education Hotline

The Montana Arts Council has a toll-free hotline for Arts Education. Sponsors wishing to apply for grant support for the Artists in Schools and Communities program can call 800-282-3092 for answers to their questions.

The Montana Arts Council will assist callers with project design and application procedures. It can also offer advice on other matters in the area of arts and education and community residencies.

Artists who would like to be included in the Artist Registry may also call for applications.

## Professional development videos aimed at teaching artists

Montana is a big state; the combination of great distances and a small population has always presented a challenge when it comes to providing professional development for our teaching artists. This year the Montana Arts Council decided to explore something new.

The idea was to offer knowledge and experience from other teaching artists in a friendly, informal atmosphere – like sitting down for a cup of coffee with them. The next two in a series of three are now available on the arts council's website.

There have already been comments on the videos from arts education colleagues around the country: "With distance, geography, cost and time as barriers – having a virtual cup of coffee with an experienced teaching artist any time is a wonderful contribution to the field."

### "Art Is the River," with Marina Weatherly

Marina Weatherly is a Montana teaching artist. She is the daughter of Elentia Brown, a dance teacher, and Joseph Epes Brown, an author and scholar of Native American



"Dog-Bear" was created by a student during a residency with teaching artist Marina Weatherly, who asked students to look at the work of Pacific Northwest artist Rick Bartow, and then create their own human/animal image.

religious traditions. As a child, she spent summers visiting different tribes and witnessing ceremonies.

The artist says of her work: "Providing specific Indian Education for All content and context with arts education can offer an exciting, rigorous, meaningful and productive learning experience for Montana's teachers and students. The arts provide a circular, connecting river, giving the students a vehicle and opportunity to gain an appreciation of other cultures and to make and personally express vital connections with their own culture, identity, place and human experience."

A PDF with links to resources is included.

### "The Rectangle Book – Often Times Less Is More," with Darwin Nordin

Darwin Nordin is a visual artist in the Seattle area and has been teaching over 25 years in schools, museums and juvenile detention centers. He says what excites him most about being a teaching artist is being a witness to creativity.

He says of his work: "Crafting meaningful art-making experiences for students is a matter of leaving room for discovery. Sequencing a series of teaching and learning moments that pose questions and present challenges with no 'single right answer' is at the heart of what I do as a teaching artist."

"A seemingly simple lesson allowing adequate time for students to explore possibilities – to tinker and play with materials – combined with plenty of time for meaningful sharing of the artwork created are the ingredients for an empowering creative experience. The following video clips step you through *The Rectangle Book*, a simple yet rich lesson that I never grow tired of presenting. I think you will see how this simple lesson can lead to a variety of explorations in art as well as other disciplines."

Both videos and the first one, "Independent Contractor – To Be or Not to Be," with Carleen Layne, are available on the arts council's website: [art.mt.gov/artists/artists\\_profdevl.asp](http://art.mt.gov/artists/artists_profdevl.asp).